

IRIS ENVIRONMENTAL

Via Email

12 August 2011

John Moody, US EPA Project Manager
US EPA, Region IX
Waste Management Division
75 Hawthorne Street (WST-4)
San Francisco, California 94105

Re: RCRA FACILITY INVESTIGATION (RFI) PROPOSED PROGRAM
Consent Order, Docket No RCRA (AO)-09-2008-03
Former Romic Environmental Technologies Corp. Facility
Chandler, Arizona

Dear Mr. Moody:

Pursuant to paragraph 35, 36, and 37 of the above-referenced Administrative Order on Consent, and your letter dated July 6, 2011 as amended by your email of August 9, 2011, Romic Environmental Technologies Corp. ("Romic") is presenting this outline and overview of the proposed work plan for a RCRA Facility Investigation (RFI) at the former Romic Lone Butte facility. The RFI Work Plan will be prepared by Clear Creek Associates, PLC and Iris Environmental.

As stated in the Order and USEPA guidance, the focus of the RFI is to identify the nature and extent of releases of hazardous waste and/or hazardous constituents at or from the facility which may pose an unacceptable risk to human health and the environment. To date, Romic has documented the nature and extent of releases at the facility in a Current Conditions report and a Conceptual Site Model report, implemented interim corrective action measures (ICAM) to mitigate soil impacts, and has participated in TRIAD style investigations both onsite and offsite to further characterize the nature and extent of vapor and groundwater impacts. As a result, the RFI is targeted at resolving remaining investigation data gaps and collecting data considered necessary for assessing the need for additional corrective action. Each targeted data gap category is described below, with the accompanying proposed investigation.

GROUNDWATER

Groundwater data gaps were discussed during the June 21-22, 2011 meetings with USEPA and GRIC-DEQ. The essence of the groundwater data gaps was whether the northern VOC plume:

- 1) Extends deeper than the existing monitoring network,
- 2) Extends north of well HC-09,
- 3) Is adequately defined on its distal (western) end.

The following investigation tasks for the RFI are proposed to collect the data considered necessary to address these groundwater data gaps.

- **WATER LEVEL MEASUREMENT** – Continued semi-annual water elevation measurements consistent with EPA approved 2007 and 2009 Sampling and Analysis Plans (SAP)
- **WATER QUALITY MONITORING SAMPLING - PDBs** –
 - The existing SAP and QAPP will be updated to provide for sampling for VOCs using passive diffusion bags (PDBs).
 - One round of vertical profile sampling will be conducted in the wells noted below utilizing PDB groundwater sampling techniques following USEPA approval. Vertical profiling will consist of approximate five-foot intervals of the saturated portion of each well's screened zone. Implementation of this task is dependent upon acquiring access to the GRIC-DEQ wells for sampling.

ROMIC WELLS

RE-101

RE-103

RE-104

RE-107

GRIC-DEQ WELLS

LB-04

LB-05

LB-10

LB-11

LB-14

HC-09

- Continued semi-annual water quality sampling in the RE series wells for VOCs will be conducted using PDB sampling techniques for consistency with GRIC-DEQ methods. This task assumes continued participation with GRIC-DEQ monitoring programs. Alternative arrangements for joint sampling would be developed separate from the RFI Work Plan.
- **GROUNDWATER INVESTIGATION ACTIVITIES**

ROMIC proposes to collect groundwater using temporary and permanent wells along multiple transects at strategic locations across the northern VOC plume. Two transects will test mid-plume patterns between existing monitoring wells. Please refer to Figure 1 for locations.

 - **ACCESS AND PERMITTING** – An access agreement will need to be obtained from the Wild Horse Pass development authority for the installation of test boring and potential wells west of I-10 as well as routine groundwater monitoring

activities west of I-10. Access will also need to be obtained from the Lone Butte Industrial Development Corporation for the proposed work east of I-10. Approval to access the LB and HC series wells will need to be granted by GRIC-DEQ.

- **GRAB GROUNDWATER SAMPLING** - A series of grab groundwater samples will be collected from borings located along each transect using either Hydropunch or temporary well sample collection techniques. Multiple, vertically spaced groundwater samples will be collected from each boring. The data will be used to investigate the lateral and/or vertical extent of the plume as described below and to evaluate the potential need for the installation of additional groundwater monitor wells. Figure 1, attached, shows the locations of the proposed transects.

- **Transect One** – Three borings will be installed in a north-south transect line to evaluate the core of the plume roughly between wells LB-15 and RE109 and west of 56th Street. The borings will be installed to 100 feet bgs to support vertical sampling through the plume. Depending on current depth to groundwater, it is anticipated that four to five groundwater samples will be collected per boring.
- **Supplemental Boring** – One boring will be drilled west of Transect One to further evaluate the vertical extent of the core of the plume. The final location for this boring will primarily be based on the results of sampling along Transect One, in order to place the supplemental boring in an optimal location. One additional well may be constructed in the supplemental boring if it is determined, based on boring sampling and Transect One groundwater data, that the base of the plume extends below the existing monitor well network depth.
- **Transect Two** – A north-south transect consisting of three borings will be installed along the axis of a line running roughly parallel to the west side of I-10 between the Gila Floodway well and well LB-14. The exact locations likely will be dependent on access around the new casino property. The purpose of this transect is to evaluate the vertical extent of the plume in the area and to further refine the delineation of the northern boundary of the plume. The borings will be installed to 100 feet bgs to support vertical sampling through the plume. Depending on current depth to groundwater, it is anticipated that four to five groundwater samples will be collected per boring.

The data on the northern extent of the plume will be used in part to evaluate whether the core of the plume extends further to the north than is indicated by the current monitoring network. If so concluded, Romic will propose to install an additional monitoring well north of the current network.

VAPOR RISK SCREENING

Multiple probe and well-based vapor sampling events have been conducted on and around the former Romic Facility. Sampling performed after completion of the interim corrective action, soil vapor extraction (SVE) program, indicates that slightly elevated soil vapor concentrations of VOCs exist in the subsurface. Romic proposes to assess the level of risk associated with the soil vapor for current and future indoor exposure scenarios. To facilitate the assessment, Romic will drill and sample one shallow soil boring at a representative location on site to collect soil samples for geotechnical testing. The suite of tests will be based on site-specific inputs for the vapor intrusion model.

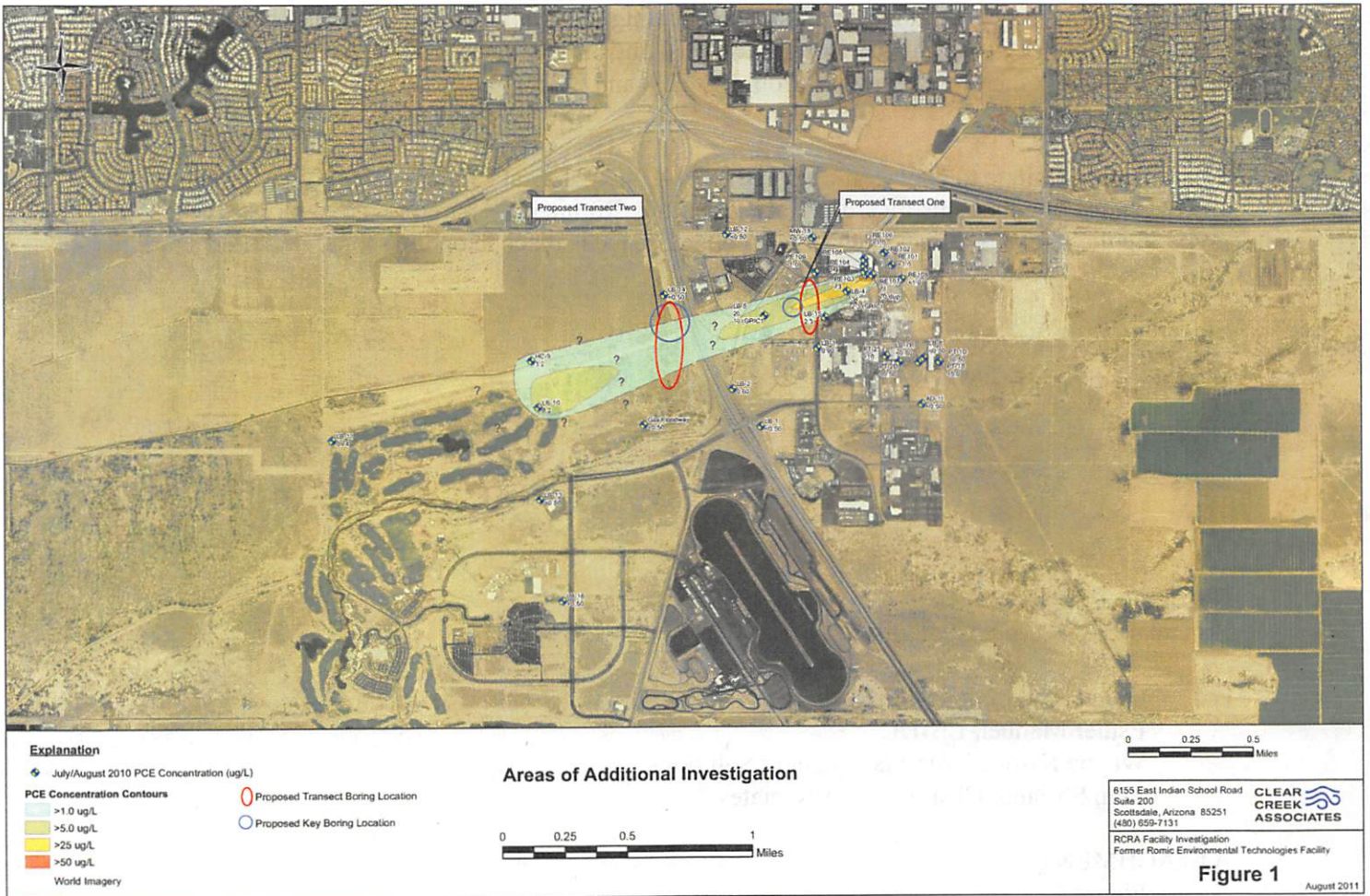
PRELIMINARY CORRECTIVE MEASURES

The following potential corrective measures are currently being considered for further assessment in RFI work plan. Romic is also considering combining the RFI with a Corrective Measures Study (CMS) in order to expedite the decision-making process and implementation if a corrective measure is found to be required.

- **MONITORED NATURAL ATTENUATION (MNA)** – Response actions conducted at the former Romic facility have been effective at removing the source of contamination. Groundwater concentrations have declined significantly in the monitor wells closest to the facility and are expected to continue to decline as the VOCs are attenuated. Continued monitoring would be conducted to ensure the anticipated trends continue and that there are no completed human health exposure pathways in the future.
- **AIR / OZONE SPARGING** – The use of sparging would be evaluated in a limited area on the former Romic facility for the purpose of enhanced mass reduction.
- **COMBINATION MNA/SPARGING** – This combination approach would be considered if MNA was identified as an appropriate corrective measure for the offsite VOC plume while additional action was required to complete source control.

Key sections that will be included in the RFI work plan are listed below. Existing documents, plans, and data will be used as appropriate to prepare the work plan.

- 1) RFI scope,
- 2) RFI Work Plan Objectives,
- 3) Environmental Setting and Characterization,
- 4) Description of Current and Previous Investigation and Corrective Action Activities,
- 5) Potential Receptor Identification (ecological and human)
- 6) RFI Project Management,
- 7) RFI Sampling and Analysis Plan (as amendments to the existing SAP),
- 8) RFI Data Quality Objectives,



- 9) RFI Quality Assurance Project Plan (as amendments to the existing QAPP),
- 10) Data Management Plan,
- 11) Health and Safety Plan,
- 12) Schedule for Implementation of the Work Plan, including preparation and submission of preliminary and final reports to US EPA.

US EPA guidance lists a Communications Plan and Community Relations Plan as parts of the RFI work plan. However, it is Romic's understanding that both plans have already been prepared by US EPA early in the North Central Plume project management. Inclusion or support for preparation is therefore requested from US EPA and GRIC-DEQ.

Please do not hesitate to contact me at (510)-834-4747 x21 or at calger@irisenv.com if you have any questions or comments regarding this submittal. Romic is prepared to move forwards with preparing the RFI Work Plan once USEPA concurrence is reached on the scope.

Sincerely,

IRIS ENVIRONMENTAL



Christopher S. Alger, P.G.
Principal Engineering Geologist

cc: Glenn Stark, GRIC-DEQ
Esther Manuel, LBIDC
Wayne Kiso, Clarus Management Solutions
Tom Suriano, Clear Creek Associates

ATTACHMENT:
Figure 1